### IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

HACHETTE BOOK GROUP, INC., HARPERCOLLINS PUBLISHERS LLC, JOHN WILEY & SONS, INC., and PENGUIN RANDOM HOUSE LLC

Plaintiffs,

v.

INTERNET ARCHIVE and DOES 1 through 5, inclusive

Defendants.

Case No. 1:20-CV-04160-JGK

DECLARATION OF JEFFREY T. PRINCE

Pursuant to 28 U.S.C. § 1746, I, **JEFFREY T. PRINCE**, declare as follows:

1. I am an economist, tenured professor, and Chairperson of Business Economics and Public Policy at the Kelley School of Business, Indiana University. I am also the Harold A. Poling Chair in Strategic Management, Co-Director of the Institute for Business Analytics at the Kelley School, Advisory Committee Member for the Indiana University Center for Survey Research, and Faculty Affiliate of the Indiana University Data Science Program. I submit this declaration in opposition to the motion for summary judgment filed in this action by Internet Archive ("IA") and in support of the motion for summary judgment filed in this action by plaintiffs Hachette Book Group, Inc., HarperCollins Publishers LLC, John Wiley & Sons, Inc., and Penguin Random House LLC (collectively, "Plaintiffs" or "Publishers"). My statements set forth below and in my Expert Report are based upon my specialized knowledge, education, and experience, as applied to the facts and circumstances of this case. If called upon, I would competently testify as to the matters contained herein.

- 2. This Declaration incorporates by reference my amended expert report dated May 25, 2022, and opinions stated in my deposition dated June 9, 2022, which was taken following receipt of the reply reports of IA's experts Ms. Hildreth, Dr. Reimers, and Dr. Jørgensen. (A true and correct copy of my expert report ("Prince Report") is annexed hereto as Exhibit 1.) (A true and correct copy of excerpts from the transcript of my deposition ("Prince Tr.") is annexed hereto as Exhibit 2.) My report contains important background and details not repeated here, including the sources for my statements.
- 3. Throughout my Declaration, I refer to the initial expert reports and reply expert reports submitted by IA experts Dr. Jørgensen (ECF No. 108-1 ("Jørgensen Report") and ECF No. 108-2 ("Jørgensen Reply"), respectively), Dr. Reimers (ECF No. 109-1 ("Reimers Report") and ECF No. 109-2 ("Reimers Reply"), respectively) and Ms. Hildreth (ECF No. 110-1 ("Hildreth Report") and ECF No. 110-2 ("Hildreth Reply"), respectively), as well as their deposition testimony. (A true and correct copy of excerpts from the transcript of the June 8, 2022 deposition of Dr. Jørgensen ("Jørgensen Tr.") is annexed hereto as Exhibit 3.) (A true and correct copy of excerpts from the transcript of the June 3, 2022 deposition of Dr. Reimers ("Reimers Tr.") is annexed hereto as Exhibit 4.) (A true and correct copy of excerpts from the transcript of the May 17, 2022 deposition of Ms. Hildreth ("Hildreth Tr.") is annexed hereto as Exhibit 5.)
- 4. Section I of this Declaration discusses the harm to Plaintiffs from Internet Archive's failure to pay a fee to rightsholders for the in-copyright ebooks it distributed. Section II discusses the likely displacement of Plaintiffs' sales of ebooks and print books to libraries and consumers caused by IA's conduct. Section III explains that IA's experts have not demonstrated an absence of harm as a consequence of IA's conduct. IA's experts' analyses are fundamentally flawed and the results they present are biased and unreliable. In Section IV, I discuss the fact that IA's experts

also cannot offer reliable or unbiased conclusions about the effect that IA's conduct likely will have on the Plaintiffs, consumers, and authors if its conduct is allowed to scale up or become more widespread.

# I. INTERNET ARCHIVE'S FAILURE TO PAY A FEE TO PLAINTIFFS FOR DISTRIBUTION OF EBOOKS FOR USE IN LIBRARY-STYLE LENDING HARMED THE PLAINTIFFS

- 5. As discussed in my report, one of the ways "to conceive of the harms the Plaintiffs have experienced as a consequence of IA's conduct" (Prince Report, ¶ 54) is that Internet Archive "did not pay Plaintiffs a fee for the Works in Suit that it distributed" (*id.* ¶ 56; *see also* ¶ 14). "Libraries pay 'library ebook fees' for ebooks independent of any payment for a print book of the same title. The library customers are permitted to loan these ebooks subject to the terms and conditions of the licenses. Fees from these licenses amount to millions of dollars in annual revenue for each Plaintiff. IA did not acquire authorized ebooks for library lending and instead scanned physical books to create digital books. Therefore, IA did not pay the Plaintiffs a fee for its distribution of the Works in Suit as ebooks, or any of the 33,003 works published by the Plaintiffs in print and digital form and hosted on the Free Ebooks Website ('33,003 Works'), that Internet Archive digitized and is distributing. Consequently, by scanning a print book, putting the digitized copy ... on its Free Ebooks Website and distributing it, and failing to pay the Plaintiffs a fee for the digital distribution rights, IA harms the Plaintiffs." (*id.* ¶ 56).
- 6. "None of IA's experts address its failure to obtain authorized ebooks, and its failure to pay the Plaintiffs a fee for distributing ebooks for their titles in library-style lending." (*id.* ¶ 73).
- 7. "Market statistics, such as library lending volumes, publisher sales, and readership, among others, indicate a well-functioning market" (id. ¶ 117) that generates "substantial revenues" (id. ¶ 103) for the Plaintiffs. For example, library lending statistics show that "OverDrive, one of

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the library aggregators in the market, processed approximately loans of ebooks to library patrons from all publishers in 2020" and "[b]etween 2017 and 2020, ebooks published by Hachette and licensed to libraries were checked out by patrons through library aggregator OverDrive over times" (Prince Report, ¶ 9). Publisher revenue statistics show that "Between 2010 and mid-2021, Penguin Random House earned approximately in net revenue from digital content (including ebooks and digital audio) in the library market. Between 2017 and 2020, HarperCollins earned in revenue from ebooks in the library market." (id. ¶ 9). Moreover, "between 39-50% of all ebook 'reads' in the U.S. (including retail ebook sales and library ebook reads) are now library ebook reads," according to two limited studies conducted by the Plaintiff publishers (id. ¶ 49).

- 8. As I discuss in my report, when considering this library market that generates "substantial revenues" (*id.* ¶ 103) for the Plaintiffs, "Internet Archive has caused and continues to cause economic harm to Plaintiff Publishers and authors ... [by] fail[ing] to pay Plaintiff Publishers a fee for its library-style distribution of ebooks" (*id.* ¶ 9). Economic harm caused by IA's conduct pertains to the 127 Works in Suit, "or any of the 33,003 Works published by the Plaintiffs in print and digital form and hosted on the Free Ebooks Website" (*id.* ¶ 56; *see also* §§ V.A and VI). "[I]f IA's conduct were allowed to continue or became widespread, rightsholders would experience substantial revenue loss" from IA's failure to pay Plaintiffs a fee or similar conduct by other organizations (*id.* ¶ 67).
- 9. I understand that in its motion for summary judgement ("IA Brief"), IA responds to this form of market harm by suggesting that the publishers do not have an established market "to license borrowing via CDL" (IA Brief, p. 32). As IA asserts: "there is no reasonable market for publishers to license borrowing via CDL; libraries have already bought and paid for these

books, and there is no good reason they should pay again. And there is no likely-to-be-developed market for publishers to license borrowing via CDL; the fact that no such market has developed over the decade that libraries have been practicing CDL is a strong indication that the future will be like the past" (IA Brief, p. 32). It is my understanding that CDL is by definition the creation and distribution for library style lending of digital copies of in-copyright print books. IA's argument is inherently circular; if the court were to accept IA's market definition, it would be accepting the proposition that a market for illegal, infringing products is distinct from the market for the legal product that is infringed.

- II. IA'S CREATION AND DISTRIBUTION OF INFRINGING DIGITAL COPIES OF PRINT BOOKS LIKELY DISPLACES PLAINTIFFS' SALES OF EBOOKS AND PRINT BOOKS TO LIBRARIES AND CONSUMERS THROUGH REGULAR RETAIL CHANNELS
  - A. In my report and deposition testimony I discuss widely acknowledged academic research evidence that a new and free competing product generally displaces sales of the positively priced incumbent product and that copyright infringement hurts the rightsholders
- 10. As further detailed in my report, academic research evidence supports that "when a free ('zero-priced') competing product enters the market, [there is] ... a downward shift in demand for existing goods" (Prince Report,  $\P$  26), "commonly referred to as the 'substitution,' 'displacement,' or 'cannibalization' effect" (*id.*  $\P$  30). Well-established theoretical academic research indicates that "[t]he shift in consumer demand from the more-expensive to the free product will be determined by consumers' perceptions of the degree of substitutability (*i.e.*, similarity) between the higher-priced product and the free product" and that "if two products are identical, when a zero-priced competing product enters the market, it displaces all of the demand for the higher-priced product," a conclusion based on "one of the well-established models in economics" (*id.*  $\P$  27).

- 11. As I explained in my report, "IA's scans have the same content as the titles sold by the publishers. IA describes their scans as 'High Quality Page Images'. Plaintiffs' deposition witnesses have explained that the quality of IA's scans "[is] not as good as an eBook that we would put out, but I think it's probably good enough for those who are willing to make the tradeoff and get something for free that they could have otherwise paid for" (id. ¶28, note 86). The introduction of a zero-priced substitute of the sort effected by IA is more consistent with high, rather than low, degree of substitutability between IA's digitized print books and books offered by Plaintiff publishers in ebook and print book formats (id. ¶28). Therefore, on the basis of theoretical reasoning alone, "[IA's zero-priced substitute product] likely displaces legal sales" (id. ¶28). In my experience as a professor and editor of an economics journal, the framework and findings of well-established theoretical models play a key role in economic research, are complementary to findings based on empirical data, and cannot be ignored or dismissed.
- 12. Turning to the findings based on empirical data, "there is substantial evidence, based on numerous empirical studies, that availability and sharing of unauthorized media files displaced legitimate sales" (Prince Report, ¶ 32). In other words, it is "widely established in the academic literature, which I discuss below, that copyright infringement generally, on net, harms rights holders by displacing sales" (id. ¶ 30). "For example, a recent survey of the economic literature on unauthorized distribution in the music, television, books, and movie markets, by Danaher, Smith, and Telang (2020), reports that 29 out of 33 peer-reviewed papers and journal articles they reviewed find that sharing of unauthorized media causes significant harm to legal media sales. ... In a survey of the music infringement literature, Liebowitz (2014) standardized metrics of the impact of unauthorized distribution on the sound recording industry from twelve peer-reviewed articles, concluding that most (50 percent to 70 percent) of the decline in sales from

1999 to 2011 is attributable to unauthorized sales. ... Empirical studies of movie infringement find a negative impact on box office receipts, prerecorded video sales/rentals, or both."  $^1$  (*id.* ¶ 32). There is also academic literature that the "reduced financial incentives" resulting from copyright infringement "lead to a reduction in investment and overall creative output" (Prince Report, ¶ 32, note 98; *see also* ¶ 33). IA's expert Dr. Reimers likewise agrees that "[r]ecent academic studies show that illegal distribution displaces legal sales in media industries" (*id.* ¶ 32, note 101).

13. Although "[t]he academic literature examining the economic effects of free unauthorized digital books [specifically] ... is limited" (id. ¶ 35), the findings from the more extensive literature regarding the effects of infringement on other copyright-protected digital works (e.g., music, movies), which I discuss above, clearly alert us to the harm rightsholders and other market participants should expect to suffer as a consequence of infringement of in-copyright ebooks (Prince Tr., 264:15-19). Moreover, the single study of the book market that I am aware of, "published by Imke Reimers, [which] examines the economic effect of unauthorized digital copies on in-copyright books and their rightsholders" (Prince Report, ¶ 35), reaches the same conclusions as the literature examining other media. (A true and correct copy of Exhibit 3 to the deposition of Dr. Reimers, reflecting Dr. Reimers' May 2016 article published in Volume 59 of the Journal of Law and Economics titled "Can Private Copyright Protection Be Effective? Evidence from Book Publishing" ("Reimers (2016)"), is annexed hereto as Exhibit 6.) "In her 2016 study, Dr. Reimers concluded that widely-available, free unauthorized digital copies of books displaced publishers' ebook sales, 'the closest substitute.' Reimers (2016) studied titles that were offered in electronic

<sup>&</sup>lt;sup>1</sup> Liebowitz, Stan J., The impacts of internet piracy, Chapters, in: Richard Watt (ed.), Handbook on the Economics of Copyright, chapter 13, pages 225-240, Edward Elgar Publishing (2014).

format by Rosetta Books and analyzed their authorized ebook and print book sales, before and after infringing digital copies were removed from the websites on which they were hosted or delisted in search engines. Similar to IA, the infringing digitized book content in this study was primarily in HTML or pdf format, rather than ripped e-book files. Reimers (2016) estimated the removal of infringing copies from the Internet increased sales of ebooks on average by at least 14 percent." (id. ¶ 35). Dr. Reimers also "found that the effect of unauthorized sales on ebook sales of popular titles is larger than on more obscure titles," although "she finds evidence of a net loss of sales even for the [more] obscure titles, indicating that any discovery effect is more than offset by displacement" (id. ¶ 37).

- 14. In other words, as I outlined in greater detail in my report, it is expected that "[t]he introduction of a zero-priced substitute of the sort effected by IA... likely displaces legal sales" (id. ¶ 28) on the basis of both widely acknowledged theoretical and empirical academic research. Based on my experience as an academic and editor of a prominent peer-reviewed journal, this would be the expectation of any such claim to be published by a reputable peer-reviewed journal, and it would require a considerable amount of reliable evidence to claim otherwise. The opinion of IA's experts did not meet this high standard for the reasons discussed below and as articulated in my report and deposition.
  - B. In my report and deposition testimony I discuss the markets in which Internet Archive's digitized copies act as a substitute for Plaintiffs' works, harming Plaintiffs' authorized sale of ebook licenses and print books
- 15. In line with the academic research outline above, my report concludes that another important way "to conceive of the harms the Plaintiffs have experienced as a consequence of IA's conduct" (Prince Report, ¶ 54), is that Internet Archive's infringing copies acted as a substitute for authorized products (*id.* ¶¶ 58, 60-63) in two markets—the library market (*id.* § V.B), and the

consumer (*i.e.*, retail) market (*id.* § V.C). "These harms, which Plaintiffs would not have suffered if IA had not infringed the Plaintiffs' copyrights, include lost license fees, lost sales, and reduced revenue as a result of any downward effect on market prices attributable to IA's infringement." (*id.* ¶ 54).

- Sales of ebook licenses in the library market: "To the extent [library] patrons 16. substituted unauthorized copies from IA for legal ebooks offered by libraries, libraries likely demanded fewer licenses from Plaintiffs. Additionally, Internet Archive made unauthorized digital copies of the Works in Suit, and a mechanism to loan the unauthorized copies to patrons, available to libraries at a zero price. Internet Archive told libraries that it 'mak[es] every library's collection into a digital collection by allowing a library to lend a digital version of physical volumes they own' [and] that [its] Open Libraries Program 'ensures that a library will not have to repurchase the same content repeatedly simply because of a change in format.' Via such claims, IA appears to have encouraged libraries to rely on the Internet Archive Free Ebook Website instead of licensing authorized ebooks, including by telling libraries that they 'may integrate links to the borrowable Books [on Internet Archive's website] in their catalog and other services." (id. ¶ 58). "Some libraries even listed links to IA's Free Ebook Website alongside OverDrive or other authorized library ebook aggregators" (id. ¶ 58, note 170; see also note 169). "This free alternative to ebooks licensed from Plaintiffs and loaned to library patrons through authorized library ebook aggregators such as OverDrive likely led some libraries to not purchase and/or renew some of their ebook licenses for the Works in Suit and/or Plaintiffs' other works on the Free Ebook Website." (*id.*  $\P$  58).
- 17. Sales of print books in the library market: IA's conduct also likely affected sales of print books to libraries "because increased supply of digital books for borrowing likely reduced

library patron demand to borrow print books, thereby reducing library demand to purchase print books. Lost print book sales are ... consistent with academic literature that examines the displacement effect of ebooks on print book sales ... [and] cannibalization of sales in one format/market on sales in another format/market." (Prince Report, ¶ 60).

- 18. Sales of ebooks and print books in the consumer (retail) market: As I further detailed in my report, the library market and consumer (retail) market for books are not distinct, because for many book readers "there is a trade-off between borrowing a book (print or ebook) from a library and purchasing the book (print or ebook) in the retail market (e.g., from Amazon or Barnes & Noble)" (id. ¶ 61). Although consumers "do not pay a library to borrow a book, they incur transactions costs" when borrowing a book from the library (id. ¶ 61). "Economists expect that if ... it becomes 'easier' to borrow a work, some consumers will be more likely to borrow the book instead of purchasing it." (id. ¶ 61) "Because IA offered its digitized copies at a zero price, more digital versions of the Works in Suit were available to borrow... reducing the transactions costs... [and making] it easier for consumers to find a copy of one of the Works in Suit to borrow... [which] likely led to lower sales in the retail market, relative to the but-for world (in which only legal digital copies were available to borrow)." (id. ¶62). "[B]ut-for IA's conduct, some consumers likely would have purchased a copy of the Works in Suit in the retail market (as an ebook or a print book)" and therefore IA's conduct "likely led to lower sales in the retail market." (id. ¶ 62).
- 19. In addition, as detailed in my report, "Internet Archive's unauthorized conduct likely has caused Plaintiff Publishers to lose revenues" in two additional ways (id. ¶ 9). Internet Archive has "likely devalued Plaintiff Publishers' works by offering them for free" (id. ¶ 9) because: "availability of a zero-price alternative puts downward price pressure on the incumbent product if the products are substitutes"; and "consumers may perceive that the product is

cheapened by the availability of a free substitute" (id. ¶ 63). Internet Archive also "exposed Plaintiff Publishers and their authors to the risk of inadequate protection of their intellectual property" (id. ¶¶ 9;  $see\ also\ \P$  64-65). None of IA's experts address these two harms as a result of IA's conduct.

## C. Internet Archive's conduct interferes with authors' and publishers' incentives to create new works

- 20. In my report I discuss the economic evidence that demonstrates the market for the licensing of ebooks to libraries and consequent lending to patrons is well-functioning (Prince Report, ¶9). "Internet Archive's conduct ... disrupts and reduces the [authors' and publishers'] incentives to create" new works (id.  $\P$  117). In a well-functioning market, "[e]conomic incentives are essential to encourage the creation of artistic works (including books, music, film, and other artistic creations) and maintaining well-functioning markets for creative works. One aspect of properly conceived economic incentives is that rightsholders (authors and publishers) have the opportunity to earn compensation from the sale of their creative works. To this end, it is important for rightsholders to have the exclusive right to determine, for the term of copyright: the format in which their works are offered to the public; whether to license or sell their works; marketing and distribution strategies; pricing; and what terms and conditions to impose for each format and channel, to the extent allowed by law, including restrictions (if any) on reproduction, sharing, and distribution." (id. ¶ 116). Publishers have "experiment[ed] with different contract types" (id. ¶ 117; see also evidence in Appendix D), which is consistent with "the notion that digital products require different pricing strategies in light of the different characteristics of print versus digital" (id. ¶ 49).
- 21. "For more than a decade, the Plaintiff Publishers, in partnership with library aggregators and libraries, have contributed to the establishment of a market for the promotion, distribution and licensing of ebooks (including the Works in Suit) to libraries, and the loaning of

ebooks to library patrons." (Prince Report, ¶ 117). As discussed in my report and above, "Market statistics, such as library lending volumes, publisher sales, and readership, among others, indicate a well-functioning market" for Plaintiff publishers (id. ¶ 117). In other words, "I see no evidence to suggest some form of market failure exists" (id. ¶ 31) and there is nothing in the data I have reviewed that might warrant policy intervention.

- 22. "Internet Archive conflates the print and ebook formats. This is fundamentally flawed; print books and ebooks differ in meaningful ways that are important to this case and have different characteristics that necessitate ebook terms and conditions and pricing that differ from those of print books. Internet Archive has caused and continues to cause economic harm to Plaintiff Publishers and authors. Internet Archive's conduct, if allowed to continue, harms not only rightsholders but also consumers because it disrupts and reduces the incentives to create." (id. ¶ 117).
- 23. As I have discussed in my report, "IA's claim that 'the public derives tremendous benefit from the program, and rightsholders will gain nothing if the public is deprived of this resource,' presumes that creative works should cost nothing. ... Presuming that creative works should be free in this setting is analogous to suggesting that it would be a good policy to allow consumers to remove products from retail shelves without paying; no economist would suggest that, because then the production of those products would stop." (id. ¶71).

# III. INTERNET ARCHIVE'S EXPERTS HAVE NOT DEMONSTRATED THAT IA'S CREATION AND DISTRIBUTION OF INFRINGING DIGITAL COPIES OF PRINT BOOKS DID NOT DISPLACE PLAINTIFFS' SALES OF EBOOK AND PRINT BOOKS TO LIBRARIES OR CONSUMERS

24. "It is my understanding that it is Internet Archive's burden to demonstrate that its conduct did not cause market harm" (Prince Report, ¶ 73), but for the reasons discussed below,

IA's experts do not reliably demonstrate that Internet Archive's conduct did not cause "lost license fees, lost sales, and reduced revenue as a result of any downward effect on market prices attributable to IA's infringement" (*id.* ¶ 54).

- A. In my report and deposition testimony I discuss that IA's experts offer limited to no analyses of the components of the market where IA's conduct likely harms publishers
- 25. Internet Archive offers three experts. In this section I outline why, as discussed in my report and deposition, the analyses that the experts provide offer either limited or no analysis of the markets where IA's conduct likely harms publishers (*i.e.*, the library market, and the consumer market), in particular for ebooks—the "closest substitute" product (Reimers (2016), p. 411) to the infringing digital copies of print books that IA produces and distributes.
  - 1. Ms. Hildreth (a librarian expert) does not offer an opinion on market harm and does not address the criticism in my report that the possibility that libraries reallocated funds as a result of IA's conduct, which she considers, necessarily implies the possibility that IA harmed the publishers and authors of the Works in Suit
- 26. As I have discussed in my report, lost revenues from the sale of ebook licenses to public and academic libraries—as a result of IA providing a substitute for authorized ebooks—are an important aspect of how IA's conduct harmed Publishers (Prince Report, ¶¶ 57-58). The only IA expert to address library ebook revenues is Ms. Hildreth, the librarian who admits that: "I am not an economist, and … I do not have an opinion as to whether Plaintiffs suffered any economic harm as a result of the IA's Digital Lending Library." (Hildreth Reply, ¶ 9).
- 27. In her original report, Ms. Hildreth argued that "even if you were to assume that CDL reduced the necessity of lending those titles via licensed ebooks, and even if books more than five years old all became easier to lend electronically through CDL for all libraries, libraries would not spend less money on acquisitions" and instead "would reallocate their spending away from

ebook licenses from those titles being accessed through CDL and would spend more on ebook licensing for newer titles or on print books" (Hildreth Report, ¶ 106). As further outlined in my report, "Ms. Hildreth presents no evidence or analysis to suggest that this assertion is reasonable or has a basis in fact. Moreover, even if the level of library spending on books is not affected by the type of conduct IA engaged in and libraries did reallocate spending from the Works in Suit to other works, Ms. Hildreth presents no argument or evidence that it is reasonable to assume the funds are used to purchase other works published by the Plaintiffs, rather than works from publishers who are not plaintiffs in this case. She also fails to discuss the possibility that IA's conduct could have diverted spending from the works in suit to other types of products, such as 'annual orders for magazines (both print and digital) and reference materials'; 'CD's DVD's, videos, streaming service subscriptions'; 'tools, games'; 'annual orders for magazines (both print and digital) and reference materials'; and/or 'replacements/binding of damaged/lost materials or periodicals.' Ms. Hildreth's opinion that the library may have purchased a different title cannot mitigate the harm IA caused rightsholders (including the authors and Plaintiffs) because her construct ignores the very specific harm to the rightsholders" (Prince Report, ¶¶ 75-76). See also Hildreth Tr., 195:25-203:25, 216:19-218:18. As I explained in my deposition, Ms. Hildreth "[was] reiterating [in her Reply Report] this claim that she made that [libraries] will spend the same amount of money and I stand by my point that even if they did spend the same amount of money, it wouldn't necessarily go to the same people. So I think she's not addressed [my criticism]" (Prince Tr., 250:8-17).

28. In her Reply Report, Ms. Hildreth also states that "[she is] unaware of any instance of a library paying for access to fewer ebook copies of a title—or buying fewer copies of a physical book for a title—where that title is available for borrowing through CDL, either from the IA or

from another library" (Hildreth Reply, ¶ 8). As I explained in my deposition, "she herself has no evidence to support [her] claim" (Prince Tr., 250:8-17). In other words, her experience is not sufficient to show that it never happened nor that it couldn't happen. In sum, in the face of widely acknowledged academic research that "[t]he introduction of a zero-priced substitute of the sort effected by IA… likely displaces legal sales" (Prince Report, ¶ 28; *see also* ¶¶ 32-35), to claim otherwise requires a considerable amount of reliable evidence, which Ms. Hildreth does not provide.

- 2. Dr. Reimers and Dr. Jørgensen do not examine plaintiffs' sales and licenses of ebooks and print books to U.S. libraries
- 29. As noted in my report, Dr. Reimers "fails to examine the effect of IA's conduct on revenue from licensing and sales to U.S. libraries", in either print or ebook format, because she only studies sales rankings of print books on Amazon (Prince Report, ¶79).
- 30. Dr. Jørgensen also doesn't study the library ebook revenues of Plaintiff Publishers; instead, as discussed in my report, Dr. Jørgensen studies OverDrive checkouts of the Works in Suit (Jørgensen Report, ¶¶ 47-53) and Hachette ebook unit sales (*id.* ¶ 58), which "combine ... sales to consumers and to libraries" (Prince Report, ¶ 78, note 213). In other words, in his analysis of Hachette sales, Dr. Jørgensen does not separately consider library sales, either as units sold or as revenues; and "Dr. Jørgensen did not examine the effect of IA's conduct on any other plaintiff besides Hachette" (*id.* ¶ 80).
- 31. Moreover, Dr. Jørgensen only studies two quarters of data, Q2 and Q3 2020, before and after the end of the IA's National Emergency Library ("NEL") (Jørgensen Report, ¶¶ 48-50), which coincided with when the Works in Suit ("WIS") were removed from IA's website in June 2020 (Prince Report, ¶ 85, note 236). As I discussed in my report, Dr. Jørgensen's analysis of OverDrive checkouts "does not necessarily represent the impact of IA's conduct on licensing

revenue, because of the complex relationship between checkouts and revenues from library sales. A library's response to patron demand is unlikely to be instantaneous; it is determined, among other factors, by ebook licenses that have already been purchased and constrained by the remaining budget, if any" (*id.* ¶ 80). In other words, looking at changes in library ebook checkouts between two quarters tells one little about potential changes in library ebook revenue as a result of IA's infringement because many ebook licenses are in effect for two years or 26 circulations and library ebook licenses may be based on annual budgetary cycles. As a result, many ebook licenses would not necessarily be due for renewal the quarter after NEL closed. Although Dr. Jørgensen had OverDrive revenue data, he "does not rely on [it for this analysis]" (*id.* ¶ 80).

- 32. In his Reply Report, Dr. Jørgensen agrees that there is a "complex relationship between checkouts and revenues from library sales" and that "it is generally not possible to identify incremental OverDrive revenue per checkout" because "OverDrive reports monthly revenues as total sales across different licensing agreements, and because that sales mix can change from month to month" (Jørgensen Reply, ¶ 26). Accordingly, "Dr. Jørgensen presents no reasonable basis upon which to draw conclusions about the effect of IA's conduct on Plaintiffs' library ebook revenues from an analysis of OverDrive checkouts" (Prince Report, ¶ 80).
- 33. In sum, IA's experts offer no economic analyses of the impact of Internet Archive on Plaintiffs' revenues in the U.S. library market from sales or licensing of ebooks or print books.
  - 3. Dr. Reimers studies the retail print book (consumer) market, but she does not investigate the licensing of ebooks, which she herself considers the "closest substitute" to free scanned copies of print books
- 34. As I have discussed in my report, Dr. Reimers' report has other shortcomings in its ability to rebut my opinion that "Internet Archive's unauthorized conduct likely has caused Plaintiff Publishers to lose revenue from sales and licenses to [both] libraries and consumers"

(Prince Report, ¶9). Although Dr. Reimers "fails to examine the effect of IA's conduct on revenue from licensing and sales to U.S. libraries" (id. ¶ 79), Dr. Reimers does study the retail (consumer market) where she analyzes "Amazon sales rankings of the print editions of Works in Suit (i.e., retail sales)" (id. ¶ 86). However, in her analysis of the consumer market, she only "studies print books, and does not study ebooks" (id. ¶ 9). Yet "in her [prior] academic research[,] Dr. Reimers concludes that ebooks are the 'closest substitute' to free scanned copies of print books" and that "physical editions of a title ... are not necessarily close substitutes for free electronic versions of the same title" (id. ¶ 81). See also Reimers (2016). As discussed in my report and my deposition, Dr. Reimers cannot rely on "an absence of data on ebooks... to draw inferences regarding the effects of IA's conduct on Plaintiffs on the basis of an analysis of print book sales" (Prince Report, ¶ 81), where "she herself has identified ebooks as the closest substitute" (Prince Tr., 258:6-7) "for the unauthorized format that IA created and distributed." (Prince Report, ¶ 81; see also ¶¶ 35-37). Moreover, it is my understanding that Plaintiff Publishers are seeking summary judgment on whether Internet Archive harms its market for ebooks.<sup>2</sup> Because Dr. Reimers "does not study ebooks" (id. ¶ 9), she does not provide an analysis of the market that Plaintiffs seek summary judgment on.

- B. As discussed in my report and deposition testimony, Dr. Jørgensen's analysis of OverDrive checkouts and Hachette sales suffers from numerous substantial flaws in his methodology that render it unreliable
- 35. Dr Jørgensen "claims that Internet Archive's 'digitized book loans' did not act as competing substitutes for library or consumer sales that Plaintiff Publishers would otherwise have

<sup>&</sup>lt;sup>2</sup> I also understand that Internet Archive moved for summary judgment alleging that there was no harm to Plaintiffs' ebook or print book markets.

made." (Prince Report, ¶ 94) As discussed earlier, Dr. Jørgensen studies only the quarter before and after the end of the National Emergency Library in June 2020 (Jørgensen Report, ¶ 43, note 94.). He concludes that because on average the number of OverDrive checkouts and Hachette unit sales for the Works in Suit happened to go down (although, as he admits, with "considerable variation" between Q2 and Q3 of 2020—and declined more than industry-wide figures for the entire ebook market—the evidence is not consistent with the notion that IA's ebooks substituted for Plaintiffs' authorized sales (Jørgensen Reply, ¶ 37, 39). But Dr. Jørgensen's analysis of OverDrive checkouts, Hachette unit sales, and IA loans is incapable of showing causality as opposed to correlation. As I discussed in my report and deposition, his analyses contain "numerous substantial flaws" (Prince Report, ¶ 78) which "render[] his conclusions unsubstantiated" and unreliable" (id. ¶ 82-85; see also ¶ 94-99).

36. As I explained, "Dr. Jørgensen does not even have a model" (*id.* ¶ 95). "[T]o analyze the impact of IA's conduct on sales, one would have to develop an empirical model that is capable of modeling the effect of causal factors on sales and distinguishing between the causal effect of IA's conduct and *other* causal factors unrelated to IA's conduct over the same period of interest," (*id.* ¶ 95) (emphasis added)—what economists also refer to as "confounding factors." As explained in my deposition, Dr. Jørgensen is effectively doing an "analysis over [just] two points in time during a period where major macroeconomic events were occurring" (Prince Tr., 252:17-21). In other words, as I discussed in my deposition, Dr. Jørgensen "[i]s really just doing a pre-post analysis" (calculating change before and after an event) "and saying any difference that

 $<sup>^3</sup>$  Jørgensen Report,  $\P\P$  51-53; Jørgensen Reply,  $\P$  38.

you see is because of the takedown of the NEL," without accounting for other possible factors influencing sales and checkouts for the Works in Suit (*id.* 177:4-8).

- This is the classical logical fallacy known as post hoc ergo propter hoc—the Latin 37. phrase for "after this, therefore because of this," meaning the false assumption that because event Y followed event X, event Y must have been caused by event X. Just because one event follows another doesn't mean it was caused by the prior event. As noted in my report, schools generally closed for Summer between Q2 and Q3 of 2020 (Prince Report, ¶84); are we to conclude that this was because of the NEL closing? Of course not, and this highlights the importance of utilizing an econometric model capable of measuring causal effects when attempting to draw causal conclusions (id. ¶ 82). Dr. Jørgensen improperly provides causal conclusions about the NEL but neglects the need for an appropriate model to do so. Specifically, his analysis looks at changes in just two variables—IA loans and either OverDrive checkouts or Hachette's unit sales—and claims to be able to assess whether one substituted for the other, which is a stated assessment of a causal relationship, while only conducting an analysis of correlation. As my report made clear, Dr. Jørgensen needed to use a model that distinguishes causal factors from confounding factors; without one, he "fail[s] to differentiate between the effect of Internet Archive's conduct and effects of other market events unrelated to Internet Archive's conduct." (id. § VII.C)
- 38. It is standard economic practice to have a model designed to distinguish causal from confounding factors. Dr. Jørgensen's failure to do so is chiefly why "the analysis that he did is not adequate to come to the conclusions that he came to" (Prince Tr., 60:17-19; *see also* 61:6-8). In my experience, as an author and an editor of a peer-reviewed academic publication, this work would have no chance to be published in a peer-reviewed academic publication.

- 39. IA's own expert, Dr. Reimers, acknowledged in her deposition that the type of empirical evidence that Dr. Jørgensen relies on to reach his conclusions<sup>4</sup> could be explained by several factors or varying differences across publishers. Dr. Reimers also stated in her deposition that one would have to "think hard" about "how [one] can get . . . a causal relationship off of the Interne Archive on . . . sales in general" based on "these data just by themselves"—suggesting that Dr. Reimers agreed with the criticism that the data Dr. Jørgensen used, without a model or further controls, was not sufficient for an analysis of market harm. (Reimers Tr., pp. 269-272; *see also* 35:10-36:13, admitting that "nobody can simply look at" the Publishers sales records for the Works in Suit" and "determine the impact of the Internet Archive, because of all the other reasons why sales of a particular title can go up or down" and stating that, "to determine the effect of the Internet Archive, one would have to control for other factors that might have happened.")
  - 1. As discussed in my report and deposition, because he lacks a model, Dr. Jørgensen cannot distinguish between the impact of IA's conduct and other events unrelated to IA's conduct, including concurrent changes in consumer demand for a particular title, factors such as seasonality, and major events of 2020 such as COVID
- 40. Dr. Jørgensen's analyses of Hachette's paperback and ebook sales and OverDrive checkouts are unreliable because they cannot distinguish between the impact of IA's conduct and other events unrelated to IA's conduct. There is a very broad range of factors that may influence

<sup>&</sup>lt;sup>4</sup> Dr. Reimers was provided with the following hypothetical data points as the basis for Dr. Jørgensen's review: "In 2019, Young Adult Book sales across the industry did not go down in Q3; the 127 WIS had lower OverDrive checkouts in Q3 2020 than the average books on OverDrive; 25 Hachette WIS had lower ebook and print book sales in Q3 than in Q2 2020, with a decline of 10 percent on average; in Q3 2020, the industry-wide decline in ebook sales was only a 3 percent decline." (Reimers Deposition, pp. 268-271).

the book sales of any particular title at any given period of time and that should be controlled for; "not accounting for those alone create[s] major problems with the ability to come to [his] conclusions" (Prince Tr., 58:21-24). As discussed in my report, book sales generally fluctuate due to "concurrent changes in consumer demand for the particular title" (Prince Report, ¶ 83), which Dr. Jørgensen does not consider. In particular, during the two periods analyzed by Dr. Jørgensen, Q2 2020 and Q3 2020, there were "major events" including the complex impacts of COVID that "may have affected ebook sales" for specific works and are "unrelated to IA's conduct" and that Dr. Jørgensen does not control for (*id.* ¶ 83). "There are also a number of additional factors that should be considered and typically included in the development of a quantitative model of harm to Plaintiffs from IA's conduct." (*id.* ¶ 83). My report further reviews such factors, as discussed below (*id.* ¶ 83-85).

41. As I explained in my report, citing to deposition testimony of Mr. Potash, the President and CEO of OverDrive, "the popularity of a book or the success of a book, in terms of either checkouts or sales, can turn on any number of factors" (id. ¶83, note 221). Some examples that spur an interest among readers include "the [high] quality of the book," events related to the author that are reported in the press "(for example, the death of Toni Morrison in 2019)", and "whether the book is made into a book or a television show, if the author makes a prominent appearance on a popular talk show, if the book is selected as part of a prominent book club, if the book receives a significant award, if one or more schools adopt the book as part of a curriculum, or if the author publishes a separate popular book that inspires consumers to purchase other books written by the same author—as well as various "negative" factors, including negative press concerning the author and unauthorized sales" (Prince Report, ¶83, note 221). Dr. Jørgensen does not control for any of these factors. He acknowledges that "popular and critical acclaim"

influences "consumer demand for a particular title but [he] does not consider whether titles that he analyzes received critical acclaim" either before or after removal of the Works in Suit from IA (*id*. ¶ 83, note 218).

- 42. Additionally, as I mentioned in my report, "marketing [strategies], including promotional discounting by either the publisher or retailers/wholesalers, availability and prices of competing books" (including "the release of new works"), "prices of used print books, pricing of ebooks," and prices of other editions (*id.* ¶ 83) are all factors that can potentially change consumer demand for a particular title in a given format. Dr. Jørgensen fails to analyze these factors.
- 43. Another important factor to control for is seasonality, a broad term that encompasses many reasons why sales of a given title may fluctuate with seasons, including "genres [that are] relatively more popular during the summer, whether school is in session and school adoptions" (*id.* ¶ 83). As discussed in my report, "a single exogenous event" such as the end of NEL which Dr. Jørgensen analyzes, "can be highly correlated with other important factors happening at the time of the exogenous event" (*id.* ¶ 85). For example, as Dr. Reimers suggests, it is possible that many of the Works in Suit are in lower demand every summer, which coincidentally happened to coincide with the closing of the National Emergency Library, and by looking at the quarter-over-quarter changes in checkouts between 2020Q2 and 2020Q3, Dr. Jørgensen does not control for the fact that some titles experience a drop in demand between Q2 and Q3 every year" (Prince Report, ¶ 85). "Notably, several of the Works in Suit are routinely included on lists suggesting or setting reading curriculum for [students] in middle and high school;

<sup>&</sup>lt;sup>5</sup> See Reimers Report ¶ 53, finding that there are "seasonal trends in the rankings of the Works in Suit around springtime" because "estimated rankings for the Works in Suit … improved [both] in March 2019 [and] in March 2020."

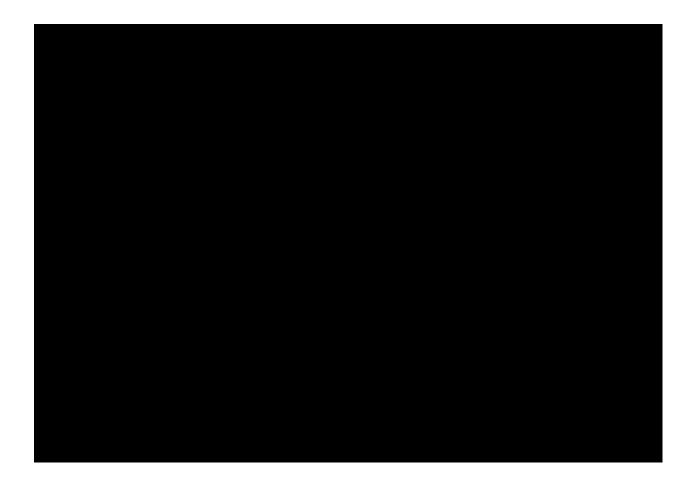
consequently, one should consider the possibility that to the extent the demand for Plaintiffs Works in Suit declined between Q2 and Q3 2020, some of it could be attributed to the end of the academic year and school-required reading." (*id.* ¶ 83). "Dr. Jørgensen acknowledges that 'students may need to read specific titles to complete their assignments' but he makes no attempt to include fluctuations in demand based on school adoption and seasonality in his analys[e]s" (*id.* ¶ 96), "all of which analyze changes between Q2 [spring] and Q3 [summer]" of 2020 (*id.* ¶ 83).

- 44. In addition to seasonality, in my report I discussed that "major events of 2020," including "the complex impact of COVID, increased awareness of racial justice issues, and the presidential election" (id. ¶ 83), are examples of "additional factors that should be included in the development of a quantitative model of harm to Plaintiffs from IA's conduct" (id. ¶ 83)—but were not. For example, Dr. Jørgensen does not consider either the "COVID-related surge in ebooks sales" which "slowed down by summer 2020," nor other COVID-related factors for each Work in Suit, which likely "varied over time and impacted different books and formats differently" (id. ¶ 84). Examples of additional factors that contributed to the "complex impact of COVID" on the book publishing industry include:
  - (i) "Many students were at home in Spring 2020. Parents purchased books that were either part of their children's curriculum or supplemental. Ebook checkouts for school-assigned reading also went up. By summertime, schools were out of session. Many students returned to school in fall 2020." (Prince Report, ¶ 84);
  - (ii) Libraries and brick-and-mortar stores closed in Spring of 2020; "[o]n the East Coast in particular, COVID spiked in spring 2020 and declined significantly in summer 2020, permitting the re-opening of physical libraries and bookstores" (id. ¶ 84);

- (iii) "There was a spike in interest in books related to *viruses*, certain leisure activities such as *cookbooks and historical fiction*, children's activity or workbooks and similar works for pre-school and K-6 aged children" (*id.* ¶ 84); and
- (iv) "Supply chain issues [such as paper shortages and warehouse staffing issues] depleted inventory of some print book titles" (id. ¶ 84) and "appear to have affected the inventory and delivery of print books" (id. ¶ 89).
- 45. Because "Dr. Jørgensen does not even have a model," (*id.* ¶ 95) he does not consider any of these factors in his analysis. He acknowledged in his deposition that he only accounts for "factors that don't change from Q2 to Q3" (Jørgensen Tr., 107:14-15) and that he did not analyze the impact of factors that could have changed from Q2 to Q3 and could have impacted the Works in Suit differently than the overall market (*id.* 106:17-139:20). Therefore, Dr. Jørgensen "fail[s] to differentiate between the effect of Internet Archive's conduct and effects of other market events unrelated to Internet Archive's conduct" (Prince Report, ¶¶ 82-84, 94-99).
  - 2. As I discussed in my deposition, Dr. Jørgensen has not addressed my fundamental criticisms of his approach and unreliable conclusions
- 46. In his Reply Report, Dr. Jørgensen argues that it would be an "apples-to-oranges" comparison to look at "outcomes before and after the onset of the COVID-19 pandemic" (Jørgensen Reply, note 61). However, there are many reasons to look at these data for each Work in Suit. For example, as I have explained in my deposition, the average decline in unit sales for the Hachette Works in Suit between Q2 and Q3 2020 could simply reflect a reversion to the prepandemic level of sales. As I stated, "reversion to steady state could be one [trend], in addition to many other events that were occurring exactly at that point in time" (Prince Tr., 252:8-16). Moreover, IA's own expert, Dr. Reimers, noted that "[t]he COVID-19 pandemic may have increased the demand for books because people spent more time at home. Therefore, one cannot simply look at absolute changes in sales" (Reimers Report, ¶ 35). Further, as I discussed in my

report, "public libraries across the United States remained largely closed or open only for limited services" during the pandemic, but "by mid/late summer 2020, additional public libraries began to reopen or expanded services" and "[b]ookstores began to open up by approximately early summer 2020" (Prince Report, ¶ 84, note 230). This likely impacted checkout rates for library ebooks and sales of consumer ebooks.

47. Dr. Jørgensen's own Exhibit 5 to his expert report suggests that the average decline in OverDrive checkouts for the Works in Suit in Q3 2020 can be explained by consumer demand for many of the Works in Suit beginning to revert to their pre-pandemic levels after a temporary spike in the Spring of 2020. Exhibit 5 shows that before Spring 2020, there were approximately ebooks checked out on OverDrive per month; in March 2020 checkouts increased to a peak of almost around the time of NEL closing in June 2020, checkouts began to decline, and reverted back to the pre-pandemic level of the checkouts per month by approximately September 2020. Dr. Jørgensen's failure to address the impact of COVID renders his report unreliable.



48. The Lion, the Witch, and the Wardrobe is a perfect example. It is a fantasy novel for children and "the most popular Hachette title" (Prince Report, ¶ 98) of the Works in Suit, according to Dr. Jørgensen's Exhibit 14. In Q2 2020, "with various disruptions due to the pandemic, there were nearly twice as many library ebook checkouts "of this title when compared to "checkouts" "in Q2 of 2019" (id. ¶ 98), which is a year-on-year increase. Following this increase in Spring 2020, checkouts for this title "experienced a in OverDrive checkouts between Q2 and Q3 2020," from checkouts in Q2 2020 to checkouts in Q3 2020 (id. ¶ 98). Thus, "changes due to COVID alone" could explain the "decline in OverDrive checkouts between Q2 and Q3 2020" for this title, as pandemic-level checkouts began to revert back to normal (id. ¶ 98). "It is highly plausible that it wasn't the end of NEL, but rather the fact that some libraries and bookstores had reopened by summer 2020" (i.e.,

reverted back to normal), and some other COVID-related factors that "explains the decline in ebook library checkouts between Q2 and Q3 2020 for this title" (*id.* ¶ 98). Because Dr. Jørgensen does not consider this potential explanation, his analysis "does not rule out the possibility that had IA's NEL continued, OverDrive checkouts for this title could have been even lower." (*id.* ¶¶ 84, 98).

- 49. In his Reply Report, Dr. Jørgensen attempts to rebut my critique and justify his flawed analysis by citing broad market-wide statistics,<sup>6</sup> which he claims show that "the overall ebook market was relatively stable between Q2 and Q3" and "not subject to the strong seasonal effects that Dr. Prince claimed existed when NEL closed" (Jørgensen Reply, ¶ 36). As I replied in my deposition, "I don't think that comparison [to market-wide statistics] gives us any definitive answers to saying that macroeconomic effects couldn't be what is driving the changes we saw," and "doesn't relieve him of the issue" (Prince Tr., 251:12-252:6). "There is a number of [relevant] factors that are changing, and even if you tried to just look at seasonality per se, there's a number of other events [such as COVID-related factors] that in conjunction together will have an impact [on sales and revenues]." (id. 253:2-6).
- 50. Even if Dr. Jørgensen does not find "an annual drop in sales over summer" using broad market-wide statistics, as he claims (Jørgensen Reply, ¶ 33), it is important to remember, as I noted in my report, that "[e]ach book is unique, and unless it's the same author in a series, it's hard to make assessments across different authors, different audiences" (Prince Report, ¶ 83, note

<sup>&</sup>lt;sup>6</sup> E.g., Dr. Jørgensen notes that according to the AAP sales statistics, "total ebook sales fell, ... from Q2 to Q3 2020, ... less than three percent" (Jørgensen Reply Report, ¶ 35) and that "according to OverDrive data, the total number of ebook loans decreased by about ... between Q2 and Q3 2020." (id. ¶ 36).

221). Accordingly, the broad, market-wide statistics may not predict the trajectory of any given title. For example, as indicated above, if "several of the Works in Suit are routinely included on lists suggesting or setting reading curriculum for children in middle and high school" (id. ¶ 83), that would suggest that the relevant comparison category is not just children's books, but specifically books that are also school-assigned reading, as two of several factors that could explain demand for a particular title. Moreover, "in absence of a model, Dr. Jørgensen does not even look at the particular sales trajectories of each of the individual Works in Suit" (id. ¶95). For example, sales of All the President's Women, a Hachette Work in Suit, had been declining since the initial publication (id. ¶95). In addition, Dr. Jørgensen's conclusions regarding Hachette sales are based on only "23 Works-in-Suit" (Jørgensen Report, ¶ 56), which he acknowledges in his deposition is considered a small sample (Jørgensen Deposition, 177:6-14). Finally, Dr. Jørgensen acknowledged that books are a "differentiated product" (Jørgensen Tr., 88:17-19), such that "each book title can be represented by a unique set of product attributes that are specific to a given title" (Jørgensen Report, ¶ 15; see also Jørgensen Tr., 88:20-89:15), which necessarily implies that a comparison to broad market-wide statistics that he provides in his Reply Report is not informative.

51. Dr. Jørgensen also uses market statistics to note that "Hachette's paperback sales of the Works in Suit decreased" (Jørgensen Report, ¶ 57), in percentage terms, in excess of the "observed uptick in market-wide print sales" of the broader industry the quarter after NEL ended (Jørgensen Reply, ¶ 39). Such differences between industry-wide statistics and Hachette's numbers merely confirm the notion in my report that "it's hard to make assessments across [different books with] different authors, different audiences" (Prince Report, ¶ 83, note 221). Moreover, "there was a huge variability in Internet Archive's relative checkout volume among the book titles, suggesting that some [books or] authors might be impacted more heavily than the

average" statistics (*id.* ¶ 107). COVID also "likely [] impacted different books and formats differently" (*id.* ¶ 84) yet Dr. Jørgensen did not analyze whether "COVID could have impacted certain titles [including the Works in Suit] differently than the overall market", as he confirmed in his deposition (Jørgensen Tr., 112:21-113:9). Nor did he consider a host of other factors, including changes in prices, the Black Lives matter movement, seasonality, variation in press mentions using publicly available Google Trends data, or any other "changing conditions" (*id.* 106-143, 159-160). As a consequence, Dr. Jørgensen's comparisons to market-wide statistics in the case of either Hachette unit sales or OverDrive checkouts are not informative.

- 3. As discussed in my report and deposition, Dr. Jørgensen's analysis of Hachette ebook and paperback sales suggests that market factors other than IA's conduct were the cause of its declining sales in Q3 2020, fails to control for such factors, and therefore is unreliable
- 52. In addition, Dr. Jørgensen's own analysis as set forth in Exhibits 16a, 16b, 17a, 17b of his initial Expert Report, "suggests [that] ... factors [other] ... than Internet Archive's conduct are plausibly the reason that could explain the observed decrease in Hachette sales [in Q3 2020]" (Prince Report, ¶ 96). This is because "some of the Works in Suit published by Hachette experienced a substantial decline in paperback and ebook sales in Q3 2020 [that was] far in excess of the decrease in IA's loans [after the close of the NEL]" (id. ¶ 96). Titles shown below, from Exhibits 16b and 17b of the Jørgensen Report, are examples of such Works in Suit, although there are several others. These data suggest that market factors other than IA's conduct were impacting unit sales for many Hachette works.

Title	Decrease in Internet Archive Loans	Decrease in Hachette Paperback Sales (All Accounts)	Decrease in Hachette Ebook Sales (All Accounts)
The Catcher in the Rye	2,508	4,485	6,544
Leviathan Wakes	144	3,332	446

Invisible	22	1,543	4,614

53. In sum, Dr. Jørgensen relies on the same *post hoc ergo propter hoc* logical fallacy in connection with Hachette sales as with OverDrive checkouts because he looks at a change in one variable over time and attributes it to a change in a variable of his choice over that same period, ignoring all other variables that were also changing.

# C. As discussed in my report and deposition testimony, Dr. Reimers' original and updated analyses suffer from numerous flaws that render them unreliable

As for Dr. Reimers' expert reports, as I described in my report, the scope of her analyses is narrow (limited to Amazon print sales rankings) and her conclusions are limited; even so, her analyses are unreliable for the reasons discussed below, which are also further detailed in my report and deposition. Dr. Reimers studies three events, which in chronological order<sup>7</sup> are 1) uploading the Works in Suit onto IA's Free Ebook Website; 2) launching the National Emergency Library; 3) removing the Works in Suit from IA's Free Ebook Website, and analyzes the "impact of IA's conduct on Amazon sales rankings of the print editions of Works in Suit (*i.e.*, retail sales)" (Prince Report, ¶ 86). Dr. Reimers does not find a "statistically significant effect" associated with uploading the Works in Suit or launching the NEL (*id.* ¶ 86). In her analysis of the removal of the Works in Suit, she finds some admittedly "(weak) evidence that ... Internet Archive['s conduct] hurt the Amazon sales rankings of their print editions slightly" (Reimers Report, ¶ 10), which is the only statistically significant result that she finds.

<sup>&</sup>lt;sup>7</sup> In her Report, Dr. Reimers discusses these measures in a different order, addressing the Amazon print sale rankings at the time of the removal of the Works in Suit from the NEL before she addresses the launch of the NEL.

- As stated in my original report, Dr. Reimers does not establish that Internet Archive's conduct did not reduce Plaintiff Publishers' revenues from print book sales, in part because "Dr. Reimers fails to account for myriad relevant exogenous factors in her analysis of changes in sales rankings" (Prince Report, ¶¶ 86-92). As a result, her analyses "can only be characterized as correlational" (*id.*¶ 93); Dr. Reimers herself describes her regressions as a "conditional correlation" (Reimers Report, ¶ 44). "Omission of factors that are likely to concurrently explain changes in sales, including "factors that Dr. Reimers has included in her own prior research" (Prince Report, ¶90), major events of 2020 (*e.g.*, COVID, the Black Lives Matter movement and a nationwide focus on racial justice issues, and the presidential election) (*id.* ¶¶ 83, 77), and "macroeconomic conditions" (*id.* ¶77) such as seasonality "plausibly bias[es] her results" (*id.* ¶88) and renders her conclusions unreliable.
- 56. Dr. Reimers' Reply Report primarily updated her analysis for the first event (uploading the Works in Suit to IA's Free Ebook Website), which still is not "able to capture a proper estimate of what the effect of putting the book up on Internet Archive is" (Prince Tr., 175:8-10). In other words, her addition of some controls was a half-hearted effort to deal with confounding factors and pales in comparison to her efforts in her published work, as confirmed during her deposition (Reimers Tr., 81:19-88:10). Ultimately, Dr. Reimers does little more than Dr. Jørgensen to deal with the *post hoc ergo propter hoc* logical fallacy, from which all three of her analyses suffer. None of the analyses in Dr. Reimers' Reply Reports lead me to revise my conclusions.

#### 1. Uploading the Works in Suit to IA's Free Ebook Website

57. For her first analysis, Dr. Reimers looked at the "Amazon sales rankings of the print editions of Works in Suit" (Prince Report, ¶ 86) and the date the Work in Suit was uploaded to

IA's Free Ebook Website, which ranged from 2011 to 2020 (Foster Declaration, Exhibit 6). Dr. Reimers found that "[there is] no evidence ... that a book's addition to the Internet Archive's CDL ... effected a change (in any direction) in rankings of the Works in Suit" (Reimers Report, ¶ 38), but that "we cannot say with certainty" (*id.* ¶ 46) whether people buy fewer or more copies after a Work is uploaded (*id.* ¶ 38). This conclusion is based on her finding that the range of coefficient estimates in her analysis includes positive values, zero, and negative values, as Dr. Reimers herself has explained. In other words, the 95% confidence interval of her regression coefficients contains both values that suggest more sales and also values that suggest fewer sales after a Work in Suit was first uploaded to IA's Website (Reimers Tr., 169:10-15).

58. Moreover, as discussed in my deposition, the effects that Dr. Reimers (*e.g.*, the coefficient of 0.0024) claims to have found "may mask non-trivial [negative] impacts on [the print sales of] particular works in suit," (Prince Tr., 261:10-11), because the point estimates that she cites are averages.

<sup>&</sup>lt;sup>8</sup> Specifically, Dr. Reimer found the following. "We cannot say with certainty that there is a relationship between a change in a book's availability at the Internet Archive and the Amazon sales rankings of its print editions because a coefficient of zero indicates no effect. To illustrate the statistical significance of the coefficients, I will use 95% confidence intervals. My coefficient and standard error imply that, if one were to estimate this regression 100 times (on 100 different samples), 95 of the 100 coefficients are expected to range between -0.0010 (for a rank improvement of 0.10%) and +0.0057 (for a worsening of 0.57%). Because this interval includes zero, I cannot statistically reject the possibility that availability at the Internet Archive has no effect on a book's ranking, and thus the result is not statistically significant." (Reimers Report, ¶ 46) (footnote omitted)

- 59. In her Reply Report, Dr. Reimers extended her analysis of uploading Works in Suit to IA's Free Ebook website by including in her regression several additional factors, one-by-one, that may have increased the demand for a title ("price, average star ratings, and the number of reviews" (Reimers Reply,  $\P$  4b) and by adding "each month of the year" (id.  $\P$  8) as a separate check for seasonality. Dr. Reimers also looked at the sensitivity of her original results when removing two types of WIS from the sample. She "dropp[ed] all editions of nonfiction books" from the sample "[t]o address the possibility that [her] results are due to large changes in [public] interest", "in topics around racial justice." (id.  $\P$  5) Separately, she also dropped titles where "[a Google search] suggested there might be a TV or movie adaptation" (id. note 5)" in an effort to capture "possible confounders ... around title-specific promotions and marketing efforts" (id.  $\P$  4), which would have "increased the demand for a title independently of its availability at the Internet Archive" (id.  $\P$  3). There are several reasons why her updated analysis is still unreliable, discussed below.
- 60. It is also important to note that the scope of Dr. Reimers' analyses is narrow not just because she focused exclusively on print books in the consumer market, but also because she studied Amazon rankings, which "are likely based on unit sales rather than [...] revenue" (id. ¶ 6). As I noted in my report, it is unclear what Amazon sales rankings measure because the algorithm that determines the rankings is vague and purportedly susceptible to manipulation (Prince Report, ¶ 92). Dr. Reimers did not perform any analysis to "justify that her choice of Amazon rankings is a reasonable proxy for [unit] sales" (id. ¶ 92). Moreover, as I discussed earlier and in my deposition, quantity demanded and revenue are not necessarily the same (Prince Tr., 254:7-9); neither are unit sales and revenue the same, and Dr. Reimers acknowledges that she did not analyze revenue (Reimers Reply, ¶ 6).

- 61. Finally, it is "difficult with the methods that she's using to get a reliable estimate of what the impact of the book being made available in 2020 [or today] would have been" (Prince Tr., 259:15-18). Her analysis includes titles first uploaded in 2011 (Foster Declaration, Exhibit 6), at a time when IA's membership base "was not very large" (Prince Tr., 258:21-23) and "there was not as much action in term[s] of IA's presence in the marketplace" (id., 175:23-176:1). In other words, it skews towards the period when the effect is likely to be at its smallest. Dr. Reimers did not consider this in her analyses (Reimers Tr., pp. 147-155). This concern is all the more applicable to a scenario of widespread future conduct. When asked about the impact of a future upload "if [she] had been looking more generally" than at "the impact of Internet Archive in 2020" (Reimers Tr., 159:23-160:22). Dr. Reimers acknowledged that "[even] if I find a null effect ... in my analysis, there is no reason to believe that there is going to be a positive or negative or a nonzero effect later on without additional analysis" (id. 161:8-14). If my understanding of Dr. Reimers' deposition testimony is correct, I agree with her observation that because her analysis is based on historical data, by itself it is irrelevant to the question of future effects of IA's conduct, such as whether allowing IA to continue or scale up its conduct, and/or others to similarly create and distribute unauthorized copies, will cause Plaintiff publishers lost print book sales on Amazon.
  - (a) Dr. Reimers makes an insufficient effort to control for concurrent macroeconomic changes in consumer demand that plausibly influenced Amazon print sales ranking and consequently cannot differentiate them from the effect of IA's conduct
- 62. As I discussed in my deposition, even with these limited additional controls, Dr. Reimers is still not able to capture a proper estimate of the effect of putting the Works in Suit up on IA's Free Ebook Website (Prince Tr., 175:6-19). She provides a half-hearted effort to identify the impact of IA's conduct, a causal relationship, which stands in contrast to the effort in her published work or the effort required to publish in a peer-reviewed academic journal. For example,

Dr. Reimers stated in her deposition that "when we look at a title's unit sales, it is often sensible to control for things like additional editions" (Reimers Tr., 82:15-18), and did this in her 2016 article, but did not "control for the publication of new editions for each one of [the] three" events Dr. Reimers analyzed for this case, including uploading Works in Suit to IA's Website (*id.* 83:8-11). "There's still certainly a number of confounding factors that [Dr. Reimers] just either doesn't or isn't able to include" (Prince Tr., 259:20-25) in her Reply Report.

- 63. For example, as I have explained in my deposition, Dr. Reimers does not include time fixed effects, which is distinct from seasonality, and this omission alone leads to unreliable estimates. "[S]he puts in seasonality controls by putting in month dummy variables ... [which is] not the same thing as putting in time fixed effects, which I think is quite important here... If year after year ... demand that varie[d] through the year [such as when demand goes down when you get into summertime and goes back up in the fall,] ... that would be a consistent year-after-year fluctuation through the year that we would call seasonality effects. But separate from that would be time fixed effects ... This would allow for ... September of 2019 to have different general demand conditions than September of 2020, for example ... I think that's something that is worth seriously considering here because we're exactly in that situation where even if you properly identified seasonality effects, there's reason to believe that the overall macroeconomic conditions in 2020, even if it's the same month, looked quite a bit different than they did in the same month in 2019. So I don't believe she, as I recall and looking at it now, included time fixed effects that would address that kind of concern, which I think there's very good reason to have here because we all know there was a major macroeconomic event in 2020." (id. pp. 259-263).
- 64. Including time fixed effects is not a matter of data availability; this is data that Dr. Reimers already had. However, as I explained in my deposition, "even in a situation where the

data aren't available, that doesn't automatically mean that the estimate means it's a proper unbiased estimate" (*id.* 259:22-25).

## (b) Dr. Reimers still relies on an untested assumption that the Works in Suit were uploaded independent of demand for the title

- 65. Lastly, as discussed in my report, "Dr. Reimers does not show that the choice to scan and upload a particular title on the Free Ebooks Website was unrelated to an increased demand for that particular title at the time, or unrelated to an expectation of potential higher demand in the future" (Prince Report, ¶ 93). "This is a factor that Dr. Reimers discusses and acknowledges would be a concern" (id. ¶ 93). Nowhere in her original or reply report does Dr. Reimers establish that these concerns are inapplicable. In her Reply Report, Dr. Reimers relies on "[t]he direct sworn testimony [from IA] regarding the decision to make books available for digital lending [independent of consumer demand]" (Reimers Reply, ¶ 7) and acknowledges that she did not do any analysis to seriously explore this concern. Indeed, as discussed in my report, "Figure 3 [in Dr. Reimers' original report] shows that there was an increase in the average Amazon sales rank approximately 3 weeks prior to CDL addition. If it were the case that the 127 Works in Suit were scanned by Internet Archive at a time when they were experiencing an increased demand, on average, Dr. Reimers failed to control for the possibility that sales would have been even higher in absence of Internet Archive's conduct. Without an analysis that seriously considers concurrent and expected future changes in demand for a particular book title, Dr. Reimers' conclusion of zero effect on sales from IA's conduct is unsubstantiated." (Prince Report, ¶ 93).
  - 2. Launching NEL: Dr. Reimers cannot distinguish between the impact of IA's conduct and other events unrelated to IA's conduct, including

## concurrent changes in consumer demand for a particular title and major events of 2020

- Or. Reimers also reviewed the "Amazon sales rankings of the print editions of Works in Suit" (Prince Report, ¶ 86) when the National Emergency Library was launched "on March 24, 2020" (Reimers Report, ¶¶ 51-53). Although Dr. Reimers found that there was a slight improvement in rankings almost immediately after the launch, she herself acknowledged that this result did not account for seasonal fluctuations in sales (*id.* ¶¶ 52-53 and Figure 6). Because Dr. Reimers also found a similar improvement in rankings a year before, this indicated that there are seasonal trends in the rankings of the Works in Suit around springtime, and on this basis, she indicated that she could not conclude that the improvement in rankings was due to the NEL rather than due to seasonal effects. In other words, Dr. Reimers' analysis, even if it were reliable (which it is not), was inconclusive; as Dr. Reimers stated, she "[could not] conclude that the NEL had either a positive or a negative effect on the Amazon sales rankings of print editions" (*id.* ¶ 53).
- 67. In addition to being inconclusive, Dr. Reimers analysis of the impact of the launch of the NEL is unreliable because she failed to adequately control for other factors. As discussed in my report, this analysis did not consider: factors that lead to "concurrent changes in consumer demand for the particular title" (Prince Report, ¶ 83) (including "control[ling] for the publication of new editions [of a title]", a factor that she considered in prior research (Reimers Deposition, 83:8-11)., "major events of 2020 (*e.g.*, the complex impact of COVID, ... [and] the presidential election)" (Prince Report, ¶ 83), or formally test for "macroeconomic conditions" (*id.* ¶ 77), all of which likely lead to a "bias in her analysis" (*id.* ¶ 90). Nor did she control for "marketing [strategies], including promotional discounting by either the publisher or retailers/wholesalers, [or] availability and prices of competing books". (*id.* ¶¶ 83; *see also* ¶ 91). Dr. Reimers does little more than Jørgensen to deal with the *post hoc ergo propter hoc* logical fallacy, from which all three of

her analyses suffer. For all these reasons, Dr. Reimers original and updated analyses do not demonstrate that IA's launch of NEL did not harm Plaintiff publishers' Amazon print book sales.

- 3. Removing the Works in Suit from IA's Free Ebook Website: Dr. Reimers cannot distinguish between the impact of IA's conduct and other events unrelated to IA's conduct, including concurrent changes in consumer demand for a particular title and major events of 2020 such as COVID and the Black Lives Matter movement
- 68. For this analysis, Dr. Reimers analyzed the impact on "Amazon sales rankings of the print editions of Works in Suit" (Prince Transcript, ¶ 86) after each Work in Suit was removed from IA's Free Ebook website. She states that "many of the Works in Suit were removed from all lending at the Internet Archive on June 2, 2020 (before the NEL terminated), and some were removed shortly after the termination of the NEL" (Reimers Report, ¶ 48). Dr. Reimers claims to have evidence that "removing the Works in Suit from IA's Free Ebook Website worsened the Amazon rank between 1% and 2%" (Prince Report, ¶ 86) but she herself characterizes this evidence as "weak" and "suggestive" (Reimers Report, ¶¶ 38, 48). In her deposition, Dr. Reimers explained that she considered the evidence for this event "weak" because "a statistically significant positive [estimate] was there for some time periods after the removal but not for all time periods after the removal." (Reimers Deposition, 176:16-18) Further, she admitted that "taken at face value, given the confidence intervals, it seems unlikely that the availability [on the Internet Archive] hurts sales, but [she could not] rule it out entirely, by the nature of statistics" (id. 177:24-178:3).
- 69. In addition, as discussed in my original report, "Dr. Reimers' analysis suffers from a lack of controls for exogenous factors unrelated to, but plausibly correlated with, IA's conduct that may have affected the sales ranking measure she studies" (Prince Report,  $\P$  87)—during the same time period around June 2020 (*e.g.*, COVID and a nationwide focus on racial justice issues),

which "likely bias[es] her model" (id. ¶ 91) and renders her results unreliable, for the reasons discussed below. As I explained in my report, the claim that removal from IA's Free Ebook website is an "exogenous event" does not in and of itself make the analysis reliable because "a single exogenous event can be highly correlated with other important factors happening at the time of the exogenous event" and Dr. Reimers' "failure to control for these events" in her analysis "renders [her] empirical models unreliable and [her] conclusions lacking empirical support and therefore speculative" (id. ¶ 85). Dr. Reimers has provided a very limited update to this analysis in her Reply Report, which still suffers from the same lack of controls and the same post hoc ergo propter hoc logical fallacy as Dr. Jørgensen's analysis and as Dr. Reimers original analysis, and therefore is still unreliable.

- (a) Dr. Reimers provides an insufficient effort to control for an increased nationwide interest in racial justice that plausibly influenced Amazon print sales ranking of books across genres
- 70. In particular, Dr. Reimers insufficiently controlled for several notable events of 2020. As I discussed in my report, "books addressing issues of racism and racial justice became very popular during the relevant period" (Prince Report, ¶ 88). "The death of George Floyd on May 25, 2020—and the subsequent release of the video footage—resulted in a huge outpouring of support for the Black Lives Matter movement and there were protests across the country over May and June 2020. Starting with this time period, demand for books about race and anti-racism surged." (id. ¶ 83, n. 225).
- 71. Dr. Reimers seems to be "aware of the fact that book sales depend on 'concomitant changes in demand for the particular book and for reading in general, which includes popularity of a book's topic" (id. ¶ 88), which means that "if a given genre or topic becomes of much greater interest than it was previously, in June 2020," making "books of one particular subject matter very

popular, the increases of sales of those books would lower or worsen the [Amazon] ranking of other books [that are not in the popular category]" (Reimers Deposition, p.196 and 197:10-24). "In fact, Dr. Reimers relies on the USA Today Bestseller List that shows a rapid growth in interest in these topics." (Prince Report, ¶ 88). In her deposition, she agreed that "there was an increase in reading interest in the top 20 [USA Today best seller list] for the topic of racial justice from, say, May to June in 2020" (Reimers Deposition, 208:15-21), acknowledging that the June 2020 top 20 USA Weekly bestseller lists have a "pretty substantial" number of books that had to do with racism (nine out of 20) (Reimers Deposition, 202:5-208:9). In short, it is plausible that Dr. Reimers' analysis incorrectly attributes the observed decline in "Amazon sales rank of the Works in Suit not in those categories" (Prince Report, ¶ 88) (*i.e.*, on non-race topics) to IA's removal of the Works in Suit from its Free Ebook Website.

the sample "[t]o address the possibility that my results are due to large changes in [public] interest" "in topics around racial justice" (Reimers Reply, ¶ 5). Dr. Reimers claims that her "main result remains robust even when [she] drop[s] nonfiction books...considering the 30 days before an event and the 60 days after the event," and she still "find[s] coefficients that are very close to zero in size and statistically indistinguishable from zero for ... removal from controlled digital lending" (id. ¶ 5). However, this approach relies on an unjustified assumption that that there was no increased "public interest in topics around racial justice and the election" (id. ¶ 5) in 2020 for fiction titles, and that only demand for non-fiction titles was affected by the Black Lives Matter movement. At her deposition, Dr. Reimers admitted that "I don't have any data evidence" for her conclusion that "the interest in fiction books is unlikely to see large shocks several years after their original publication" (Reimers Deposition, 198:13-199:11). Without support, this analysis hinges on an

unjustified assumption and is not informative. In sum, as discussed in my report and deposition, "there's still certainly a number of confounding factors that she just either doesn't or isn't able to include," (Prince Tr., 259:20-25) of which the Black Lives Matter movement is only one such factor.

## (b) Dr. Reimers fails to control for complex impacts of COVID that plausibly influenced Amazon print sales ranking

- 73. Dr. Reimers also fails to control for the complex impacts of COVID that plausibly influenced Amazon print sales rankings for the Works in Suit, beyond her review of fiction titles alone. "Dr. Reimers does acknowledge that the 'COVID-19 pandemic may have increased the demand for books because people spent more time at home.' However, she does not discuss the potential effects the pandemic had on interest in particular genres and/or subjects (from the demand side), or constraints from the supply side at particular points in time." (Prince Report, ¶ 87) The removal of the Works in Suit from IA's Free Ebook Website in June 2020 happened at a time of "recent popularity of fiction and nonfiction titles addressing viruses and pandemics," historical fiction, apocalyptic science fiction, romance novels, cookbooks, and children's workbooks, for example (id. ¶ 84 and notes 225, 232-34). The relative Amazon ranking of many Works in Suit that are not books among these genres or topics necessarily decreased during the relevant period (id. ¶ 88).
- 74. In her deposition, Dr. Reimers confirmed that "[b]eyond that distinction of fiction and nonfiction, ... [she] did not control for [the impact of] COVID" (Reimers Deposition, 198:8-12). Because several of the shifts in demand due to COVID appear to have been in topics and genres of interest that pertain to fiction, her efforts do not solve this weakness in her analysis. It is therefore possible that Dr. Reimers' analysis incorrectly attributes the observed decline in "Amazon sales rank of the Works in Suit not in those categories" (Prince Report, ¶ 88) (*i.e.*,

unrelated to viruses, pandemics, apocalyptic science fiction, romance novels, historical fiction, cookbooks, and children's workbooks) to IA's removal of the Works in Suit from its Free Ebook Website.

75. In addition, complex supply chain problems, such as "paper shortages," and "printing capacity" constraints "depleted inventory of some print book titles, which affected publishers' ability to fulfill new orders" (id. ¶ 84) and likely constrained the inventory of print books for select popular titles. In her Reply Report, Dr. Reimers argues that "many events that affect the entire industry (like supply chain issues) only pose a threat to [her] identification strategy if they affect the Works in Suit differently from comparable books" (Reimers Reply, ¶ 4d). In her deposition, she admitted that "supply chain issues" "can affect different titles differently" (Reimers Deposition, 200:2-201:6). "It is therefore possible that Dr. Reimers' analysis incorrectly attributes the observed decline in Amazon sales ranking of print books with limited or zero inventory to IA's impact," (Prince Report, ¶89) especially for popular titles. In sum, omission of numerous COVIDrelated factors is one of "a number of confounding factors that she [still] ... doesn't ... include," (Prince Tr., 259:20-25) and this omission also plausibly biases her results. In short, as discussed in my deposition, "there is a lot of reason to doubt that" the relationships she presents (i.e., the correlation that Dr. Reimers finds between IA's conduct and Amazon sales ranking of print books) "are informative about the questions that she's trying to answer" (id. 60:20-61:5).

## IV. IA'S EXPERTS FAIL TO ADDRESS THE HARM TO PLAINTIFFS IF INTERNET ARCHIVE'S CONDUCT BECAME MORE WIDESPREAD OR SCALED UP

76. As discussed in my report and deposition, if IA were allowed to scale up its conduct, or others were to similarly create and distribute unauthorized copies, there would be substantial harm to market participants, including consumers and authors (Prince Report, §VI). For example,

"if IA's conduct were allowed to continue or became widespread, rightsholders would experience substantial revenue loss" (*id.* ¶ 67) because of IA or similar institutions failing to pay Plaintiffs a fee for distribution of ebooks for the purpose of library-style lending. "Moreover, libraries would no longer need to obtain legal ebooks to serve their communities' demand for backlist books. This would create very substantial market harm to authors and publishers because it would displace demand from potential and existing library patrons for both library ebooks and print books from authorized distribution channels." (*id.* ¶ 68). Scenarios of widespread harm include "Internet Archive scaling up its ebook offerings (including without limitation on the number of titles and number of copies of given titles); substantially expanding the number of partner libraries in its Open Libraries Program (from 65 currently, to many of the 9,000+ public libraries); or other copycat website(s) or non-profit organization(s) scanning print books and offering them as unauthorized digital books under some brand of CDL" (*id.* ¶ 66).

- 77. As discussed in my report, "Dr. Reimers and Dr. Jørgensen do not address... the resulting longer-term impact" (id. ¶ 74) of the scenarios described above either in their analyses of Amazon print sales rankings, or Hachette sales and Overdrive checkouts, respectively, during and after the National Emergency Library was operating, or in any other distinct analyses or discussions.
- 78. By contrast, as discussed in my report, "widespread" conduct includes a scenario in which Internet Archive becomes a "central repository of ebooks," "substantially expanding the number of partner libraries in the Open Libraries Program (from 65 currently, to many of the 9000+ public libraries" and numerous academic libraries, which presumably could contribute 'concurrent copies' to increase the number of copies available for borrowing (*id.* ¶ 17), and "be able to link from their website card catalogs as an alternative to purchasing authorized ebook

licenses for titles offered by Plaintiff Publishers" (*id.* ¶ 66, note 194). In other words, if Internet Archive, with its Open Libraries program, becomes a national digital library and a centralized hub used by libraries around the country for the lending of millions of backlist titles in digital form, it would create very substantial market harm to publishers and authors. "Libraries would no longer need to obtain a considerable number of legal backlist ebooks titles to serve their communities because they could link to IA or similar websites as an alternative to their purchase of authorized ebook licenses, as explained by Ms. Hildreth. As a result, libraries would purchase considerably fewer ebook licenses for backlist titles offered by Plaintiff Publishers." (*id.* ¶¶ 68, 69). This is a very different scenario than Internet Archive's NEL in 2020. "At the extreme end of the spectrum … there would be a scenario in which IA … [was] known to all libraries and all consumers and had free unauthorized digital books of all published backlist titles, with a sufficient number of copies to meet worldwide demand without wait lists." (*id.* ¶ 68).

79. Moreover, IA's experts misinterpret the results of their flawed analyses to suggest that IA's conduct was inconsequential. Dr. Jørgensen acknowledges that "Internet Archive's patrons digitally borrowed the Works in Suit about 57 thousand times between 2017 and 2020" (Jørgensen Report, ¶8). But one consequence of his flawed research design is that it understates the extent of IA's activities and the harm caused by IA's conduct. As discussed in my deposition, "[Dr. Jørgensen] couched everything in terms of IA's checkouts as a percentage of OverDrive, which by and large is a relatively small percentage, but in a sense then that's setting him up to find a zero [impact of IA's conduct]. By starting with small numbers to begin with, then by construction you're making it easier to get a zero in your estimates. But it's to mask the fact that in absolute terms, it still can be a non-trivial impact." (Prince Tr., 256: 5-13). Moreover, even if we were to consider Dr. Jørgensen's flawed statistics, his own analysis "suggest[s] that some

authors might be impacted more heavily than the average" because "there was a huge variability in Internet Archive's relative checkout volume among the book titles" (Prince Report, ¶ 107).

- 80. In the case of Dr. Reimers' analyses, as I discussed earlier and in my deposition, her analysis of Amazon print sales rankings after each Work in Suit was uploaded to IA's website spans titles first made available from 2011-2020, and therefore her results are not informative regarding the likely future impact if the challenged conduct is allowed to scale up or become more widespread. She also does not have a model of market behavior and therefore can't predict future market conditions. (Prince Tr., 259:15-18).
- 81. Dr. Reimers also presents misleading calculations on the life cycle of book sales that trivialize the revenues from titles published more than five years ago (Prince Report, § VII.C). These include numerous calculation flaws that I detail in my report (id. §VIII.D). In her Reply Report, Dr. Reimers "concede[d] some of my points about lifetime analysis" (Prince Tr., 260:7-8) and provided a new analysis, which is also problematic. (Reimers Reply, § III). In her new analysis, Dr. Reimers looked at the lifetime sales for an edition of a particular title (id. ¶¶ 11-13), which is the wrong metric because sales of any given edition can decline with the introduction of a paperback or new edition to the market, whereas overall sales of the title increase (Prince Report, ¶115; see also Reimers Tr., 261:23-266: 19). As I discussed earlier, lifetime sales for a title is the correct metric for the evaluation of the commercial performance of an in-copyright work (Prince Report, ¶ 115, note 294). Moreover, as I discussed in my report, my fundamental criticism of her statistic is that it is "irrelevant to the question of potential harm that Internet Archive's infringement caused Plaintiff Publishers in the form of lost sales because it ignores the fact that backlist titles, including titles originally published more than five years ago, in the aggregate, are significant drivers of Plaintiff Publishers' revenue" (id. ¶ 111). In her Reply, Dr. Reimers

"agree[d] that the share of first-five-year sales relative to a publisher's entire catalog is relevant" and acknowledged that she did not do such an analysis (Reimers Reply, ¶ 12). As I discuss in my report, "[p]ublishers rely on the consistent and substantial revenue stream from backlist book titles to offset the financial risks that publishers undertake when publishing new books, which have an uncertain future revenue stream" (Prince Report, ¶ 53).

- 82. Furthermore, as discussed in my report, "Dr. Reimers suggests that the library market is trivial or unimportant for Plaintiff Publishers by stating that 'libraries make up a small fraction of the publishing market.' The size of the library market, relative to the total market, does not justify or mitigate IA's conduct. A variety of data, including data cited in Dr. Reimers' own report, demonstrate that Plaintiff Publishers earn substantial revenues in the library market from sales and licensing of print and ebooks ...[and] ebook revenues have been increasing in size and therefore importance over the last decade." (*id.* ¶ 103). It is misleading to suggest that because Plaintiffs' revenues from sales to libraries are small relative to Plaintiffs' total revenues, IA's conduct was of no consequence.
- 83. "Dr. Jørgensen [also] opines that Internet Archive's loan volume was 'small' relative to Overdrive-based library lending. The term 'small' as used by Dr. Jørgensen in this context is unscientific and meaningless. One could similarly postulate that the theft of 2% of the jewelry in the jewelry store is a "small" amount, but that shouldn't be relevant to a determination of whether or not the thief broke the law" (*id.* ¶ 106). Dr. Jørgensen also underestimates Plaintiffs' revenue from library ebook sales for the Works in Suit, stating that it is "about dollars" (Jørgensen Report, ¶ 35), which is considerably lower than my calculations based on Plaintiffs' actual sales records, as opposed to his estimates based on Overdrive's revenues. As I discussed in my deposition, even after removing audiobooks, which reduce my

estimate of library ebook sales by "about 5 to 10 percent", revenue from library ebook sales for the Works in Suit is "in the [range of] 1.4" million dollars, which is considerably greater than Dr. Jørgensen's estimate. (Prince Tr., 214:6-23)

- 84. In sum, analyses by Drs. Reimers and Jørgensen downplay the risks and "harm [to] market participants, including consumers and artists" (Prince Report, §VI) if IA's practices become scaled up or widespread.
- 85. Finally, although Dr. Jørgensen and Dr. Reimers argue that the impact of the Internet Archive on the Publishers has been de minimis, the volume of IA's unauthorized loans of the Works in Suit up through their removal in June 2020 is indeed relevant to the questions in this case. As I discussed in my report and at deposition, the numerous events and market conditions impacting book sales (*id.* ¶¶ 83-85) are factors that render the task of adequately isolating the impact of IA's conduct on the Publishers' revenues very challenging. IA's loan volume for the Works relative to the size of the library ebook market or the total consumer and library book market means that developing an empirical analysis capable of reliably and accurately measuring this impact is even more difficult.
- 86. Moreover, an analysis based on historical data may not be useful in understanding future trends, to the extent important changes in the market have occurred since the end of the research period and/or are expected to occur in the future. As detailed in my report, this is of particular importance in this case because "IA has experienced considerable growth" since 2020 when the Works in Suit were taken down; "as of December 2021, the Open Libraries program alone added nearly 3 million copies of books available for simultaneous lending" (*id.* ¶ 21). In sum, the analyses by Drs. Jørgensen and Reimers are biased, inaccurate, and unreliable, and as a

consequence their analyses fail to tell us anything about IA's impact as a result of its further widespread conduct after June 2020.

JEFFREY F. PRINCE